

DOCKET NO.: CSKL0005-100**PATENT-DRAFT****In the Claims:**

Please cancel claims 1-5 and add claims 6-24.

1-5 (cancelled)

6. (new) A process for stabilizing a pyrene actin composition comprising:
- a) concentrating the pyrene actin composition; and
 - b) mixing the concentrated pyrene actin composition with sucrose and a stabilizing agent.
7. (new) The process of claim 6 further comprising mixing a reducing agent to the composition of step b).
8. (new) The process of claim 6, wherein the composition of step b) is rapidly frozen.
9. (new) The process of claim 8, wherein said frozen composition is lyophilized.
10. (new) The process of claim 7 wherein said reducing agent is dithiothreitol.
11. (new) The process of claim 10, wherein the concentration of dithiothreitol is 10 mM.
12. (new) The process of claim 8, wherein said composition is rapidly frozen in liquid nitrogen or a dry ice ethanol bath.
13. (new) The process of claim 6, wherein said stabilizing agent is dextran.
14. (new) The process of claim 9, wherein the composition is lyophilized for 40 hours over a temperature from -40 °C to 30 °C.

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15. (new) The process of claim 6, wherein said pyrene actin is concentrated to 0.2 to 40 mg/ml.
16. (new) The process of claim 6, wherein said pyrene actin is concentrated to greater than 10 mg/ml.
17. (new) The process of claim 6 wherein said composition comprises ATP and CaCl_2 .
18. (new) The process of claim 6 wherein said sucrose is present in amount of 5% w/v.
19. (new) The process of claim 6 wherein said stabilizing agent is present in an amount of 1% w/v.
20. (new) The process of claim 9 further comprising:
a) resuspending the lyophilized actin of claim 9 in A-buffer; and
b) incubating said resuspended actin on ice.
21. (new) The method of claim 20 wherein said resuspended actin is centrifuged.
22. (new) The method of claim 21 wherein said actin is centrifuged at $100,000 \times g$.
23. (new) A composition comprising pyrene actin, ATP, sucrose, and a stabilizing agent.
24. (new) The composition of claim 23 wherein said pyrene actin is present in an amount of greater than 10 mg/ml.